Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAJDA1614

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	AUG 06	CAS REGISTRY enhanced with new experimental property tags
NEWS 3	AUG 06	FSTA enhanced with new thesaurus edition
NEWS 4	AUG 13	CA/CAplus enhanced with additional kind codes for granted patents
NEWS 5	AUG 20	CA/CAplus enhanced with CAS indexing in pre-1907 records
NEWS 6	AUG 27	Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB
NEWS 7	AUG 27	USPATOLD now available on STN
NEWS 8	AUG 28	CAS REGISTRY enhanced with additional experimental spectral property data
NEWS 9	SEP 07	STN AnaVist, Version 2.0, now available with Derwent World Patents Index
NEWS 10	SEP 13	FORIS renamed to SOFIS
NEWS 11	SEP 13	INPADOCDB enhanced with monthly SDI frequency
NEWS 12	SEP 17	CA/CAplus enhanced with printed CA page images from 1967-1998
NEWS 13	SEP 17	CAplus coverage extended to include traditional medicine patents
NEWS 14	SEP 24	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 15	OCT 02	CA/CAplus enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS 16	OCT 19	BEILSTEIN updated with new compounds
NEWS 17	NOV 15	Derwent Indian patent publication number format enhanced
NEWS 18	NOV 19	WPIX enhanced with XML display format
NEWS 19	NOV 30	ICSD reloaded with enhancements
NEWS 20	DEC 04	LINPADOCDB now available on STN
NEWS 21	DEC 14	BEILSTEIN pricing structure to change
NEWS 22	DEC 17	USPATOLD added to additional database clusters
NEWS 23	DEC 17	IMSDRUGCONF removed from database clusters and STN
NEWS 24	DEC 17	DGENE now includes more than 10 million sequences
NEWS 25	DEC 17	TOXCENTER enhanced with 2008 MeSH vocabulary in MEDLINE segment
NEWS 26	DEC 17	MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary
NEWS 27	DEC 17	CA/CAplus enhanced with new custom IPC display formats
NEWS 28	DEC 17	STN Viewer enhanced with full-text patent content from USPATOLD
NEWS 29	JAN 02	STN pricing information for 2008 now available
NEWS 30	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS 31	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS 32	JAN 28	MARPAT searching enhanced
NEWS 33	JAN 28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS 34	JAN 28	TOXCENTER enhanced with reloaded MEDLINE segment

```
 NEWS 35  JAN 28  MEDLINE and LMEDLINE reloaded with enhancements
 NEWS 36  FEB 08  STN Express, Version 8.3, now available


 NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
              AND CURRENT DISCOVER FILE IS DATED 24 JANUARY 2008

 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS LOGIN    Welcome Banner and News Items
 NEWS IPC8     For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that
specific topic.

  All use of STN is subject to the provisions of the STN Customer
  agreement.  Please note that this agreement limits use to scientific
  research.  Use for software development or design or implementation
  of commercial gateways or other similar uses is prohibited and may
  result in loss of user privileges and other penalties.

* * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 10:16:05 ON 12 FEB 2008

=> FIL REGISTRY
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                        ENTRY    SESSION
FULL ESTIMATED COST                                      0.21       0.21

FILE 'REGISTRY' ENTERED AT 10:16:44 ON 12 FEB 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   11 FEB 2008  HIGHEST RN 1002789-56-1
DICTIONARY FILE UPDATES:  11 FEB 2008  HIGHEST RN 1002789-56-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> E "N-HEXANOYL-D-SPHINGOSINE"/CN 25
E1            1     N-HEXANOYL-D-ERYTHRO-SPHINGOSINE/CN
E2            1     N-HEXANOYL-D-GLUCOSAMINE/CN
E3            0 --> N-HEXANOYL-D-SPHINGOSINE/CN
E4            1     N-HEXANOYL-DL-ALANINE/CN
E5            1     N-HEXANOYL-DL-GLUFOSINATE/CN
E6            1     N-HEXANOYL-DL-METHIONINE/CN
E7            1     N-HEXANOYL-L-HOMOSERINE LACTONE/CN
```

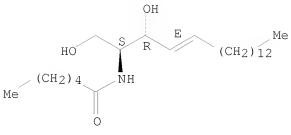
```
E8            1     N-HEXANOYL-L-METHIONINE/CN
E9            1     N-HEXANOYL-L-PHENYLALANINE/CN
E10           1     N-HEXANOYL-L-PROLINE/CN
E11           1     N-HEXANOYL-N'-(6-METHYL-2-PYRIDYL)THIOUREA/CN
E12           1     N-HEXANOYL-N-METHYLGLYCINE/CN
E13           1     N-HEXANOYL-N-OCTYL-D-GLUCAMINE/CN
E14           1     N-HEXANOYL-N-OCTYLGLUCAMINE/CN
E15           1     N-HEXANOYL-N-PHENYLHYDROXYLAMINE/CN
E16           1     N-HEXANOYL-O-CARBOXYMETHYLCHITOSAN/CN
E17           1     N-HEXANOYLADENOSINE/CN
E18           1     N-HEXANOYLCAPROLACTAM/CN
E19           1     N-HEXANOYLCAPRYLLACTAM POLYMER/CN
E20           1     N-HEXANOYLCAPRYLLACTAM POLYMER, SRU/CN
E21           1     N-HEXANOYLCHITOSAN/CN
E22           1     N-HEXANOYLCYSTEAMINE/CN
E23           1     N-HEXANOYLFERROCENE/CN
E24           1     N-HEXANOYLGLYCINE/CN
E25           1     N-HEXANOYLHEPARIN/CN

=> S E1
L1            1 N-HEXANOYL-D-ERYTHRO-SPHINGOSINE/CN

=> DIS L1 1 SQIDE

L1   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2008 ACS on STN
RN   124753-97-5  REGISTRY
CN   Hexanamide, N-[(1S,2R,3E)-2-hydroxy-1-(hydroxymethyl)-3-heptadecen-1-yl]-
     (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   Hexanamide, N-[(1S,2R,3E)-2-hydroxy-1-(hydroxymethyl)-3-heptadecenyl]-
     (9CI)
CN   Hexanamide, N-[2-hydroxy-1-(hydroxymethyl)-3-heptadecenyl]-,
     [R-[R*,S*-(E)]]-
OTHER NAMES:
CN   C6-Ceramide
CN   D-erythro-C6-Ceramide
CN   N-Caproyl-C18-sphingosine
CN   N-Hexanoyl-D-erythro-sphingosine
CN   N-Hexanoylsphingosine
FS   STEREOSEARCH
MF   C24 H47 N O3
SR   CA
LC   STN Files:   AGRICOLA, BIOSIS, CA, CAPLUS, CASREACT, CHEMCATS, CIN,
       CSCHEM, TOXCENTER, USPAT2, USPATFULL
DT.CA  CAplus document type:  Journal; Patent
RL.P   Roles from patents:  ANST (Analytical study); BIOL (Biological study);
       PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or
       reagent); USES (Uses)
RLD.P  Roles for non-specific derivatives from patents:  BIOL (Biological
       study); PREP (Preparation); PRP (Properties); USES (Uses)
RL.NP  Roles from non-patents:  ANST (Analytical study); BIOL (Biological
       study); CMBI (Combinatorial study); FORM (Formation, nonpreparative);
       OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties);
       RACT (Reactant or reagent); USES (Uses)
RLD.NP Roles for non-specific derivatives from non-patents:  BIOL (Biological
       study)

Absolute stereochemistry.
Double bond geometry as shown.
```



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

222 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
222 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file medline caplus wpids uspatfull
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	8.07	8.28

FILE 'MEDLINE' ENTERED AT 10:18:02 ON 12 FEB 2008

FILE 'CAPLUS' ENTERED AT 10:18:02 ON 12 FEB 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'WPIDS' ENTERED AT 10:18:02 ON 12 FEB 2008
COPYRIGHT (C) 2008 THE THOMSON CORPORATION

FILE 'USPATFULL' ENTERED AT 10:18:02 ON 12 FEB 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

=> s l1
L2 240 L1

=> s l2 and (paclitaxel or taxol)
L3 15 L2 AND (PACLITAXEL OR TAXOL)

=> d l3 1-15 ibib, abs

L3 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:1420210 CAPLUS
DOCUMENT NUMBER: 148:24415
TITLE: ceramide and oxaliplatin combination for cancer therapy
INVENTOR(S): Wanebo, Harold J.
PATENT ASSIGNEE(S): Roger Williams Hospital, USA
SOURCE: PCT Int. Appl., 50pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2007143175 A2 20071213 WO 2007-US13077 20070531
WO 2007143175 A3 20080131
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
US 2008033039 A1 20080207 US 2007-809418 20070531
PRIORITY APPLN. INFO.: US 2006-810243P P 20060602

AB This invention provides a method for increasing apoptosis in a cancer cell comprising contacting the cancer cell with (a) oxaliplatin and (b) C6-ceramide, sequentially or concomitantly, wherein the oxaliplatin and C6-ceramide are in amts. such that the apoptosis induced by the combination of oxaliplatin and C6-ceramide is greater than the apoptosis induced by contacting the cancer cell with either oxaliplatin alone or C6-ceramide alone. This invention also provides a method of decreasing the size of a tumor, which method comprises contacting the tumor with (a) oxaliplatin and (b) C6-ceramide, sequentially or concomitantly, wherein the oxaliplatin and C6-ceramide are in amts. such that the decrease in tumor size induced by the combination of oxaliplatin and C6-ceramide is greater than the decrease in tumor size induced by contacting the tumor with either oxaliplatin alone or C6-ceramide alone. This invention further provides a pharmaceutical composition and a method for treating a subject afflicted with cancer.

L3 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:1087710 CAPLUS
DOCUMENT NUMBER: 147:496093
TITLE: Paclitaxel and ceramide co-administration in biodegradable polymeric nanoparticulate delivery system to overcome drug resistance in ovarian cancer
AUTHOR(S): Devalapally, Harikrishna; Duan, Zhenfeng; Seiden, Michael V.; Amiji, Mansoor M.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, School of Pharmacy, Northeastern University, Boston, MA, USA
SOURCE: International Journal of Cancer (2007), 121(8), 1830-1838
CODEN: IJCNAW; ISSN: 0020-7136
PUBLISHER: Wiley-Liss, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The objective of this study was to overcome drug resistance upon systemic administration of combination paclitaxel (PTX) and the apoptotic signaling mol. C6-ceramide (CER) in biodegradable poly(ethylene oxide)-modified poly(epsilon-caprolactone) (PEO-PCL) nanoparticles. S.c. sensitive (wild-type) and multidrug resistant (MDR-1 pos.) SKOV-3 human ovarian adenocarcinoma xenografts were established in female Nu/Nu mice. PTX and CER were administered i.v. either as a single agent or in combination in aqueous solution and in PEO-PCL nanoparticles to the tumor-bearing mice. There was significant ($p < 0.05$) tumor growth suppression in both wild-type SKOV-3 and multidrug resistant SKOV-3TR models upon single dose co-administration of PTX (20 mg/kg) and CER (100 mg/kg) in nanoparticle formulations as compared to the individual agents and administration in aqueous solns. For instance, in SKOV-3 wild-type model, more than 4.3-fold

increase ($p < 0.05$) in tumor growth delay and 3.6-fold ($p < 0.05$) increase in tumor volume doubling time (DT) were observed with the combination treatment in nanoparticles as compared to untreated animals. Similarly, 3-fold increase ($p < 0.05$) in tumor growth delay and tumor volume DT was observed in SKOV-3TR model. Body weight changes and blood cells counts were used as measures of safety and, except for an increase in platelet counts ($p < 0.05$) in PTX + CER treated animals, there was no difference between various treatment strategies. The results of this study show that combination of PTX and CER in biodegradable polymeric nanoparticles can serve as a very effective therapeutic strategy to overcome drug resistance in ovarian cancer.

REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:539325 CAPLUS
DOCUMENT NUMBER: 147:157698
TITLE: Modulation of intracellular ceramide using polymeric nanoparticles to overcome multidrug resistance in cancer
AUTHOR(S): van Vlerken, Lilian E.; Duan, Zhenfeng; Seiden, Michael V.; Amiji, Mansoor M.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, School of Pharmacy, Department of Hematology and Oncology, Massachusetts General Hospital, Northeastern University, Boston, MA, USA
SOURCE: Cancer Research (2007), 67(10), 4843-4850
CODEN: CNREA8; ISSN: 0008-5472
PUBLISHER: American Association for Cancer Research
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Although multidrug resistance (MDR) is known to develop through a variety of mol. mechanisms within the tumor cell, many tend to converge toward the alteration of apoptotic signaling. The enzyme glucosylceramide synthase (GCS), responsible for bioactivation of the proapoptotic mediator ceramide to a nonfunctional moiety glucosylceramide, is overexpressed in many MDR tumor types and has been implicated in cell survival in the presence of chemotherapy. The purpose of this study was to investigate the therapeutic strategy of coadministering ceramide with paclitaxel , a commonly used chemotherapeutic agent, in an attempt to restore apoptotic signaling and overcome MDR in the human ovarian cancer cell line SKOV3. Poly(ethylene oxide)-modified poly(epsilon-caprolactone) (PEO-PCL) nanoparticles were used to encapsulate and deliver the therapeutic agents for enhanced efficacy. Results show that indeed the cotherapy eradicates the complete population of MDR cancer cells when they are treated at their IC50 dose of paclitaxel. More interestingly, when the cotherapy was combined with the properties of nanoparticle drug delivery, the MDR cells can be resensitized to a dose of paclitaxel near the IC50 of non-MDR (drug sensitive) cells, indicating a 100-fold increase in chemosensitization via this approach. Mol. anal. of activity verified the hypothesis that the efficacy of this therapeutic approach is indeed due to a restoration in apoptotic signaling, although the beneficial properties of PEO-PCL nanoparticle delivery seemed to enhance the therapeutic success even further, showing the promising potential for the clin. use of this therapeutic strategy to overcome MDR.

REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:1204388 CAPLUS
DOCUMENT NUMBER: 145:511655
TITLE: Nanoparticulate delivery systems comprising ceramide

for treating multi-drug resistance
INVENTOR(S): Amiji, Mansoor M.; Shenoy, Dinesh B.; Vlerken, Lilian Van
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 11pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006257493	A1	20061116	US 2006-413067	20060427
PRIORITY APPLN. INFO.:			US 2005-675837P P	20050428

AB An encapsulated delivery system, and, in particular, a nanoparticulate delivery system representing a qual. different approach to overcoming multi-drug resistance while simultaneously administering the chosen drug treatment to a patient, e.g., in a site-specific manner, is disclosed. A composition according to the invention includes a therapeutically effective amount of one or more multi-drug resistance reversing agents selected from the group consisting of ceramide and ceramide modulators; and a therapeutically effective amount of a therapeutic agent, wherein the therapeutic agent is different from the one or more multi-drug resistance reversing agents, and the one or more multi-drug resistance reversing agents and the therapeutic agent are encapsulated, preferably co-encapsulated, in a biocompatible, biodegradable delivery vehicle for delivery to a patient in need of treatment, for example, for specific localization at, or higher probability of delivery to, a treatment site in a patient administered the composition Preferably, the one or more multi-drug resistance reversing agents are ceramide, paclitaxel or tamoxifen. Thus, C6-ceramide (CER) and paclitaxel (PAX) were co-encapsulated in poly(ethylene oxide) (PEO)-modified poly(ε-caprolactone) (PCL) nanoparticles. Enhanced apoptotic activity and cell death were observed in vitro in the wildtype human ovarian cancer cell line SKOV3 due to an additive effect of individual PTX and CER cytotoxicities. However, in the multi-drug resistant (MDR) cells, there was significant enhancement of cell death when combining concns. of PTX and CER that individually did not result in significant cell killing.

L3 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:264352 CAPLUS
DOCUMENT NUMBER: 144:305123
TITLE: Combinations of ceramide and chemotherapeutic agents for inducing tumor cell death
INVENTOR(S): Wanebo, Harold J.; Mehta, Shashikant
PATENT ASSIGNEE(S): Roger Williams Hospital, USA
SOURCE: U.S., 43 pp., Cont.-in-part of U.S. Ser. No. 287,884, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 7015251	B1	20060321	US 2002-958453	20020424
WO 2000059517	A1	20001012	WO 2000-US9440	20000407
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,				

MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-287884 B2 19990407
WO 2000-US9440 W 20000407

AB This invention provides a method for increasing apoptosis in tumor cells and a method of decreasing a size of a tumor, said methods comprising contacting the tumor cells with: a) an effective amount of at least one antitumor chemotherapeutic agent and b) an effective amount of a ceramide, sequentially or concomitantly, wherein the apoptosis induced by the combination of the antitumor chemotherapeutic agent and the ceramide is greater than the apoptosis induced by contact of the tumor cells with either the antitumor chemotherapeutic agent alone or the ceramide alone. This invention also provides a method of treating cancer in a subject which comprises a method according to either of the above-described methods. This invention provides a method for treating cancer in a subject comprising administering to the subject an effective amount of at least one antitumor chemotherapeutic agent and an effective amount of at least one ceramide, sequentially or concomitantly. This invention provides a pharmaceutical composition comprising at least one antitumor chemotherapeutic agent in an amount effective to induce apoptosis of tumor cells and at least one ceramide in an amount effective to induce apoptosis of tumor cells and a pharmaceutically acceptable carrier.

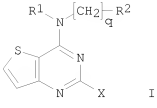
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:532671 CAPLUS
DOCUMENT NUMBER: 139:101145
TITLE: Preparation of thienopyrimidines as inhibitors of prolylpeptidase, inducers of apoptosis and cancer treatment agents
INVENTOR(S): Dumas, Jacques; Sibley, Robert; Wood, Jill
PATENT ASSIGNEE(S): Bayer Corporation, USA
SOURCE: PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003055890	A1	20030710	WO 2002-US41168	20021220
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002364211	A1	20030715	AU 2002-364211	20021220

PRIORITY APPLN. INFO.: US 2001-343048P P 20011221
WO 2002-US41168 W 20021220

OTHER SOURCE(S): MARPAT 139:101145
GI



I

AB The title compds. [I; X = OR3, NR3R4; R1 = H, alkyl; R2 = (un)substituted cycloalkyl, Ph, (un)saturated 4-8 membered heterocyclyl containing 1-3 heteroatoms selected from O and S; R3 = H, alkyl; R4 = (CH2)mA, (CH2)pOA; A = (un)substituted cycloalkyl, (un)saturated 4-8 membered heterocyclyl containing 1-4 heteroatoms selected from N, O and S, etc.; or NR3R4 = (un)saturated 4-8 membered heterocyclyl containing 0-4 heteroatoms selected from N, O and S; m, p = 0-5; q = 0-1; q + (m or p) = 1-6], useful for the inhibiting the prolylpeptidase, inducing apoptosis and treating cancer, were prepared E.g., a 3-step synthesis of I [X = (2-thienylmethyl)amino; R1 = H; R2 = 4-(MeO2C)C6H4; q = 1], starting with thieno[3,2-d]pyrimidine-2,4-diol, was given. All exemplified compds. I were found to inhibit prolylpeptidase at or below of 10 μM.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:532653 CAPLUS

DOCUMENT NUMBER: 139:101144

TITLE: Preparation of quinazolines and quinolines as inhibitors of prolylpeptidase, inducers of apoptosis and cancer treatment agents

INVENTOR(S): Dumas, Jacques; Sibley, Robert; Smith, Roger; Su, Ning; Chen, Yuanwei; Wood, Jill; Guernon, Leatte; Dixon, Julie; Brennan, Catherine; Boyer, Stephen

PATENT ASSIGNEE(S): Bayer Corporation, USA; et al.

SOURCE: PCT Int. Appl., 266 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

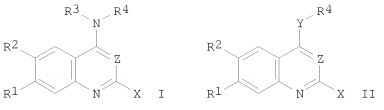
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003055866	A1	20030710	WO 2002-US41176	20021220
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002361846	A1	20030715	AU 2002-361846	20021220
PRIORITY APPLN. INFO.:			US 2001-343112P P	20011221
			WO 2002-US41176 W	20021220

OTHER SOURCE(S): MARPAT 139:101144

GI



AB The title compds. [I or II; Z = CH, N; Y = O, S; X = OR5, NR5R6; R1, R2 = H, NH2, CN, halo, OH, NO2 (wherein R1 and R2 are both not H); R3 = H, alkyl; R4 = (CH2)yR41 (R41 = (un)substituted alkyl; y = 0-2)], useful for the inhibiting the prolyl peptidase, inducing apoptosis and treating cancer, were prepared Thus, reacting 2,4,6-trichloroquinazoline (preparation given) with Me 4-(aminomethyl)benzoate.HCl in the presence of AcONa in H2O followed by treating the resulting Me 4-{[(2,6-dichloro-4-quinazolinyl)amino]methyl}benzoate with piperidine afforded I [Z = N; X = piperidino; R1 = H; R2 = Cl; R3 = H; R4 = 4-(MeO2C)C6H4CH2]. Most of the exemplified compds. I and II were found to inhibit prolylpeptidase at or below of 10 μM.

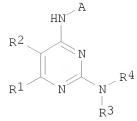
REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN

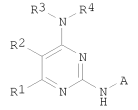
ACCESSION NUMBER: 2003:532524 CAPLUS
DOCUMENT NUMBER: 139:101141
TITLE: Preparation of 2,4-diaminopyrimidines as inhibitors of prolylpeptidase, inducers of apoptosis and cancer treatment agents
INVENTOR(S): Dumas, Jacques; Dixon, Julie; Sibley, Robert; Wood, Jill
PATENT ASSIGNEE(S): Bayer Corporation, USA
SOURCE: PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003055489	A1	20030710	WO 2002-US41146	20021220
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002367172	A1	20030715	AU 2002-367172	20021220
PRIORITY APPLN. INFO.:			US 2001-343047P	P 20011221
			WO 2002-US41146	W 20021220

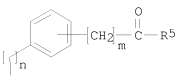
OTHER SOURCE(S): MARPAT 139:101141
GI



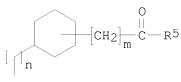
I



II



III



IV

AB The title compds. [I or II; R1, R2 = H, halo, OH, etc.; R3 = H; R4 = (un)substituted alkyl, cycloalkyl, aryl, alkylaryl; or NR3R4 = (un)saturated 4-8 membered heterocyclyl which optionally contains 1-3 addnl. heteroatoms selected from N, O and S; A = III or IV; R5 = OH, OR6, NR8R9; R6 = alkyl, haloalkyl, aryl, haloaryl; R8, R9 = H, alkyl, aryl, etc.; n, m = 0-1], useful for the inhibiting prolylpeptidase, inducing apoptosis and treating cancer, were prepared E.g., a 3-step synthesis of I [A = 4-(HO2C)C6H4CH2; R1 = H; R2 = Me; R3 = H; R4 = 2-thienylmethyl], starting from Me 4-(aminomethyl)benzoate and 2,4-dichloro-5-methylpyrimidine, was given. All exemplified compds. I were found to inhibit prolylpeptidase at or below of 10 μM.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:963204 CAPLUS

DOCUMENT NUMBER: 138:362308

TITLE: The role of MAPK pathways in the action of chemotherapeutic drugs

AUTHOR(S): Boldt, Simone; Weidle, Ulrich H.; Kolch, Walter

CORPORATE SOURCE: The Beatson Institute for Cancer Research, Cancer Research UK, Glasgow, G61 1BD, UK

SOURCE: Carcinogenesis (2002), 23(11), 1831-1838
CODEN: CRNGDP; ISSN: 0143-3334

PUBLISHER: Oxford University Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB In this study we have investigated the role of mitogen-induced and stress-activated MAP kinase pathways in the cellular response to taxol, etoposide and ceramide in three different human cancer cell lines: HeLa cervical carcinoma, MCF7 breast cancer and A431 squamous carcinoma cells. The mitogen-induced ERK MAPKs were linked to cell proliferation and survival, whereas the stress-activated MAPKs, p38 and JNK, were connected with apoptosis. Our results show that all drugs activated MAPKs, but that the extent and kinetics of activation were different. In order to assay the biol. consequences of drug-induced MAPK activation we employed selective MAPK inhibitors and measured both long-term clonogenic survival as well as short-term parameters including apoptosis, mitochondrial metabolic integrity and cell cycle progression. Our results show that drug induced toxicity is not correlated with any

singular parameter, but rather a combination of effects on cell cycle and apoptosis. In certain constellations the modulation of MAPK pathways could enhance or decrease drug efficacies. These effects mainly pertained to the regulation of apoptosis and clonogenic survival, but they were highly dependent on the combination of drug and cell line without any clear patterns of correlations emerging. These results suggest that the modulation of MAPK pathways to enhance the efficacy of chemotherapeutic drugs is of limited value unless it is tailored to the specific combination of drug and cancer.

REFERENCE COUNT: 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:725478 CAPLUS
DOCUMENT NUMBER: 133:276331
TITLE: Ceramide and chemotherapeutic agents for inducing cell death in tumor cells
INVENTOR(S): Wanebo, Harold J.; Mehta, Shashikant
PATENT ASSIGNEE(S): Roger Williams Hospital, USA
SOURCE: PCT Int. Appl., 104 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000059517	A1	20001012	WO 2000-US9440	20000407
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1206270	A1	20020522	EP 2000-923188	20000407
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
US 7015251	B1	20060321	US 2002-958453	20020424
PRIORITY APPLN. INFO.:			US 1999-287884	A2 19990407
			WO 2000-US9440	W 20000407

AB This invention provides a method for increasing apoptosis in tumor cells and a method of decreasing a size of a tumor, said methods comprising contacting the tumor cells with: (a) an effective amount of at least one antitumor chemotherapeutic agent; and (b) an effective amount of a ceramide, sequentially or concomitantly, wherein the apoptosis induced by the combination of the antitumor chemotherapeutic agent and the ceramide is greater than the apoptosis induced by contact of the tumor cells with either the antitumor chemotherapeutic agent alone or the ceramide alone. This invention also provides a method of treating cancer in a subject which comprises a method according to either of the above-described methods. This invention provides a method for treating cancer in a subject comprising administering to the subject an effective amount of at least one antitumor chemotherapeutic agent and an effective amount of at least one ceramide, sequentially or concomitantly. This invention provides a pharmaceutical composition comprising at least one antitumor chemotherapeutic agent in an amount effective to induce apoptosis of tumor cells and at least one ceramide in an amount effective to induce apoptosis of tumor cells and a pharmaceutically acceptable carrier. Paclitaxel-induced apoptosis in Jurkat cells was enhanced by

C6-N-hexanoyl-D-sphingosine.
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 11 OF 15 USPATFULL on STN
ACCESSION NUMBER: 2007:43191 USPATFULL
TITLE: Methods and compositions for the delivery of biologically active agents
INVENTOR(S): Esfand, Roseita, Mississauga, CANADA
Santerre, Paul J., Whitby, CANADA
Yang, Meilin, Mississauga, CANADA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2007037891	A1	20070215
APPLICATION INFO.:	US 2006-404290	A1	20060414 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2005-672158P	20050415 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: CLARK & ELBING LLP, 101 FEDERAL STREET, BOSTON, MA, 02110, US
NUMBER OF CLAIMS: 48
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 19 Drawing Page(s)
LINE COUNT: 1670
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention features polymers noncovalently complexed with a biologically active agent. The polymer complexes include at least one shielding moiety covalently tethered to at least one complexing moiety, which is complexed with at least one biologically active agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 12 OF 15 USPATFULL on STN
ACCESSION NUMBER: 2006:301138 USPATFULL
TITLE: Nanoparticulate delivery systems for treating multi-drug resistance
INVENTOR(S): Amiji, Mansoor M., Attleboro, MA, UNITED STATES
Shenoy, Dinesh B., Boston, MA, UNITED STATES
Vlerken, Lilian van, Brookline, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006257493	A1	20061116
APPLICATION INFO.:	US 2006-413067	A1	20060427 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2005-675837P	20050428 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: WEINGARTEN, SCHURGIN, GAGNEBIN & LEBOVICI LLP, TEN POST OFFICE SQUARE, BOSTON, MA, 02109, US
NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 741
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An encapsulated delivery system, and, in particular, a nanoparticulate

delivery system representing a qualitatively different approach to overcoming multi-drug resistance while simultaneously administering the chosen drug treatment to a patient, e.g., in a site-specific manner, is disclosed. A composition according to the invention includes a therapeutically effective amount of one or more multi-drug resistance reversing agents selected from the group consisting of ceramide and ceramide modulators; and a therapeutically effective amount of a therapeutic agent, wherein the therapeutic agent is different from the one or more multi-drug resistance reversing agents, and the one or more multi-drug resistance reversing agents and the therapeutic agent are encapsulated, preferably co-encapsulated, in a biocompatible, biodegradable delivery vehicle for delivery to a patient in need of treatment, for example, for specific localization at, or higher probability of delivery to, a treatment site in a patient administered the composition. Preferably, the one or more multi-drug resistance reversing agents are ceramide, paclitaxel or tamoxifen.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 13 OF 15 USPATFULL on STN

ACCESSION NUMBER:	2006:70187 USPATFULL			
TITLE:	Combinations of ceramide and chemotherapeutic agents for inducing tumor cell death			
INVENTOR(S):	Wanebo, Harold J., East Greenwich, RI, UNITED STATES Mehta, Shashikant, Warwick, RI, UNITED STATES			
PATENT ASSIGNEE(S):	Roger Williams Hospital, Providence, RI, UNITED STATES (U.S. corporation)			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 7015251	B1	20060321	
	WO 2000059517		20001012	
APPLICATION INFO.:	US 2000-958453		20000407	(9)
	WO 2000-US9440		20000407 20020424	PCT 371 date
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1999-287884, filed on 7 Apr 1999, ABANDONED			
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	GRANTED			
PRIMARY EXAMINER:	Cook, Rebecca			
LEGAL REPRESENTATIVE:	White, Esq., John P., Cooper & Dunham LLP			
NUMBER OF CLAIMS:	14			
EXEMPLARY CLAIM:	1			
NUMBER OF DRAWINGS:	47 Drawing Figure(s); 24 Drawing Page(s)			
LINE COUNT:	2051			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides a method for increasing apoptosis in tumor cells and a method of decreasing a size of a tumor, said methods comprising contacting the tumor cells with: a) an effective amount of at least one antitumor chemotherapeutic agent and b) an effective amount of a ceramide, sequentially or concomitantly, wherein the apoptosis induced by the combination of the antitumor chemotherapeutic agent and the ceramide is greater than the apoptosis induced by contact of the tumor cells with either the antitumor chemotherapeutic agent alone or the ceramide alone. This invention also provides a method of treating cancer in a subject which comprises a method according to either of the above-described methods. This invention provides a method for treating cancer in a subject comprising administering to the subject an effective amount of at least one antitumor chemotherapeutic agent and an effective amount of at least one ceramide, sequentially or concomitantly. This invention provides a pharmaceutical composition comprising at least one antitumor chemotherapeutic agent in an amount effective to induce

apoptosis of tumor cells and at least one ceramide in an amount effective to induce apoptosis of tumor cells and a pharmaceutically acceptable carrier.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 14 OF 15 USPATFULL on STN
ACCESSION NUMBER: 2005:30390 USPATFULL
TITLE: Method and system for systemic delivery of growth arresting, lipid-derived bioactive compounds
INVENTOR(S): Kester, Mark, Harrisburg, PA, UNITED STATES
Stover, Thomas, Hershey, PA, UNITED STATES
Lowe, Tao, Hershey, PA, UNITED STATES
Adair, James, UNITED STATES
Kim, Young Shin, Hershey, PA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005025820	A1	20050203
APPLICATION INFO.:	US 2004-835520	A1	20040426 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-465938P	20030425 (60)
	US 2003-465937P	20030428 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Barbara E. Johnson, WEBB ZIESENHEIM LOGSDON ORKIN & HANSON, P.C., 700 Koppers Building, 436 Seventh Avenue, Pittsburgh, PA, 15219-1818
NUMBER OF CLAIMS: 77
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 20 Drawing Page(s)
LINE COUNT: 1954
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A system and method for optimizing the systemic delivery of growth-arresting lipid-derived bioactive drugs or gene therapy agents to an animal or human in need of such agents utilizing nanoscale assembly systems, such as liposomes, resorbable and non-aggregating nanoparticle dispersions, metal or semiconductor nanoparticles, or polymeric materials such as dendrimers or hydrogels, each of which exhibit improved lipid solubility, cell permeability, an increased circulation half life and pharmacokinetic profile with improved tumor or vascular targeting.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 15 OF 15 USPATFULL on STN
ACCESSION NUMBER: 2004:285842 USPATFULL
TITLE: Drug formulations for coating medical devices
INVENTOR(S): Schultz, Robert K., Poway, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004224003	A1	20041111
APPLICATION INFO.:	US 2004-773756	A1	20040206 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-446318P	20030207 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

```
LEGAL REPRESENTATIVE:   KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET,
                        FOURTEENTH FLOOR, IRVINE, CA, 92614
NUMBER OF CLAIMS:       22
EXEMPLARY CLAIM:        1
NUMBER OF DRAWINGS:     1 Drawing Page(s)
LINE COUNT:             361
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     The present invention relates to oil-based formulations of hydrophobic
       drugs for the uniform coating of medical devices such as vascular stents
       and balloons. Another aspect of the present invention is an
       intravascular medical device having an oil-based coating suitable for
       delivering a water-insoluble drug, comprising one or more of an
       anti-oxidant, an anti-inflammatory and an anti-restenotic agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.


=> d his

     (FILE 'HOME' ENTERED AT 10:16:05 ON 12 FEB 2008)

     FILE 'REGISTRY' ENTERED AT 10:16:44 ON 12 FEB 2008
                E "N-HEXANOYL-D-SPHINGOSINE"/CN 25
L1             1 S E1

     FILE 'MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 10:18:02 ON 12 FEB
     2008
L2           240 S L1
L3            15 S L2 AND (PACLITAXEL OR TAXOL)

=> s l2 and (?cancer? or ?tumor?)
L4           78 L2 AND (?CANCER? OR ?TUMOR?)

=> s l4 and combination?
L5           22 L4 AND COMBINATION?

=> d l5 1-22 ibib, abs

L5   ANSWER 1 OF 22  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2007:1420210  CAPLUS
DOCUMENT NUMBER:          148:24415
TITLE:                    ceramide and oxaliplatin combination for
                          cancer therapy
INVENTOR(S):              Wanebo, Harold J.
PATENT ASSIGNEE(S):       Roger Williams Hospital, USA
SOURCE:                   PCT Int. Appl., 50pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    -------------------    --------
     WO 2007143175        A2    20071213    WO 2007-US13077        20070531
     WO 2007143175        A3    20080131
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA,
             CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI,
             GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG,
             KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
             MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,
             PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN,
```

TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

US 2008033039 A1 20080207 US 2007-809418 20070531
PRIORITY APPLN. INFO.: US 2006-810243P P 20060602

AB This invention provides a method for increasing apoptosis in a cancer cell comprising contacting the cancer cell with (a) oxaliplatin and (b) C6-ceramide, sequentially or concomitantly, wherein the oxaliplatin and C6-ceramide are in amts. such that the apoptosis induced by the combination of oxaliplatin and C6-ceramide is greater than the apoptosis induced by contacting the cancer cell with either oxaliplatin alone or C6-ceramide alone. This invention also provides a method of decreasing the size of a tumor, which method comprises contacting the tumor with (a) oxaliplatin and (b) C6-ceramide, sequentially or concomitantly, wherein the oxaliplatin and C6-ceramide are in amts. such that the decrease in tumor size induced by the combination of oxaliplatin and C6-ceramide is greater than the decrease in tumor size induced by contacting the tumor with either oxaliplatin alone or C6-ceramide alone. This invention further provides a pharmaceutical composition and a method for treating a subject afflicted with cancer.

L5 ANSWER 2 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:1087710 CAPLUS
DOCUMENT NUMBER: 147:496093
TITLE: Paclitaxel and ceramide co-administration in biodegradable polymeric nanoparticulate delivery system to overcome drug resistance in ovarian cancer
AUTHOR(S): Devalapally, Harikrishna; Duan, Zhenfeng; Seiden, Michael V.; Amiji, Mansoor M.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, School of Pharmacy, Northeastern University, Boston, MA, USA
SOURCE: International Journal of Cancer (2007), 121(8), 1830-1838
CODEN: IJCNAW; ISSN: 0020-7136
PUBLISHER: Wiley-Liss, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The objective of this study was to overcome drug resistance upon systemic administration of combination paclitaxel (PTX) and the apoptotic signaling mol. C6-ceramide (CER) in biodegradable poly(ethylene oxide)-modified poly(epsilon-caprolactone) (PEO-PCL) nanoparticles. S.c. sensitive (wild-type) and multidrug resistant (MDR-1 pos.) SKOV-3 human ovarian adenocarcinoma xenografts were established in female Nu/Nu mice. PTX and CER were administered i.v. either as a single agent or in combination in aqueous solution and in PEO-PCL nanoparticles to the tumor-bearing mice. There was significant ($p < 0.05$) tumor growth suppression in both wild-type SKOV-3 and multidrug resistant SKOV-3TR models upon single dose co-administration of PTX (20 mg/kg) and CER (100 mg/kg) in nanoparticle formulations as compared to the individual agents and administration in aqueous solns. For instance, in SKOV-3 wild-type model, more than 4.3-fold increase ($p < 0.05$) in tumor growth delay and 3.6-fold ($p < 0.05$) increase in tumor volume doubling time (DT) were observed with the combination treatment in nanoparticles as compared to untreated animals. Similarly, 3-fold increase ($p < 0.05$) in tumor growth delay and tumor volume DT was observed in SKOV-3TR model. Body weight

changes and blood cells counts were used as measures of safety and, except for an increase in platelet counts ($p < 0.05$) in PTX + CER treated animals, there was no difference between various treatment strategies. The results of this study show that combination of PTX and CER in biodegradable polymeric nanoparticles can serve as a very effective therapeutic strategy to overcome drug resistance in ovarian cancer .

REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:1030640 CAPLUS
DOCUMENT NUMBER: 147:335807
TITLE: Role of Acid Ceramidase in Resistance to FasL: Therapeutic Approaches Based on Acid Ceramidase Inhibitors and FasL Gene Therapy
AUTHOR(S): Elojeimy, Saeed; Liu, Xiang; Mckillop, John C.; El-Zawahry, Ahmed M.; Holman, David H.; Cheng, Jonathan Y.; Meacham, William D.; Mahdy, Ayman E. M.; Saad, Antonio F.; Turner, Lorianne S.; Cheng, Joseph; Day, Terrence A.; Dong, Jian-Yun; Bielawska, Alicja; Hannun, Yusuf A.; Norris, James Scott
CORPORATE SOURCE: Department of Microbiology and Immunology, Medical University of South Carolina, Charleston, SC, USA
SOURCE: Molecular Therapy (2007), 15(7), 1259-1263 CODEN: MTOHCK; ISSN: 1525-0016
PUBLISHER: Nature Publishing Group
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Head and neck squamous cell cancers (HNSCC) are particularly aggressive and are resistant to many forms of treatment. Ceramide metabolism has been shown to play an important role in cancer progression and cancer resistance to therapy in many tumor models, including HNSCC. Here, we study the role of the ceramide-metabolizing enzyme acid ceramidase (AC) in therapeutic responses in HNSCC. First, we show that AC is over-expressed in 70% of head and neck squamous cell tumors compared with normal tissues, suggesting that this enzyme may play an important role in facilitating HNSCC growth. Next, comparison of three HNSCC cell lines with low, medium, and high levels of AC reveals an inverse correlation between the levels of AC and their response to exogenous C-6-ceramide. Furthermore, over-expression of AC in SCC-1 cells increased resistance to Fas-induced cell killing. Conversely, down-regulation of AC using specific AC small interfering RNA (siRNA) sensitized the SCC-1 cancer cell line to Fas-induced apoptosis. Finally, we show that the AC inhibitor LCL 204 can sensitize HNSCC cell lines to Fas-induced apoptosis both in vitro and in a xenograft model in vivo, suggesting that the combination of FasL gene therapy and LCL 204 may become a new treatment option for advanced-stage head and neck cancer.
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:539325 CAPLUS
DOCUMENT NUMBER: 147:157698
TITLE: Modulation of intracellular ceramide using polymeric nanoparticles to overcome multidrug resistance in cancer
AUTHOR(S): van Vlerken, Lilian E.; Duan, Zhenfeng; Seiden, Michael V.; Amiji, Mansoor M.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, School of Pharmacy, Department of Hematology and Oncology,

Massachusetts General Hospital, Northeastern University, Boston, MA, USA
SOURCE: Cancer Research (2007), 67(10), 4843-4850
CODEN: CNREA8; ISSN: 0008-5472
PUBLISHER: American Association for Cancer Research
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Although multidrug resistance (MDR) is known to develop through a variety of mol. mechanisms within the tumor cell, many tend to converge toward the alteration of apoptotic signaling. The enzyme glucosylceramide synthase (GCS), responsible for bioactivation of the proapoptotic mediator ceramide to a nonfunctional moiety glucosylceramide, is overexpressed in many MDR tumor types and has been implicated in cell survival in the presence of chemotherapy. The purpose of this study was to investigate the therapeutic strategy of coadministering ceramide with paclitaxel, a commonly used chemotherapeutic agent, in an attempt to restore apoptotic signaling and overcome MDR in the human ovarian cancer cell line SKOV3. Poly(ethylene oxide)-modified poly(epsilon-caprolactone) (PEO-PCL) nanoparticles were used to encapsulate and deliver the therapeutic agents for enhanced efficacy. Results show that indeed the cotherapy eradicates the complete population of MDR cancer cells when they are treated at their IC50 dose of paclitaxel. More interestingly, when the cotherapy was combined with the properties of nanoparticle drug delivery, the MDR cells can be resensitized to a dose of paclitaxel near the IC50 of non-MDR (drug sensitive) cells, indicating a 100-fold increase in chemosensitization via this approach. Mol. anal. of activity verified the hypothesis that the efficacy of this therapeutic approach is indeed due to a restoration in apoptotic signaling, although the beneficial properties of PEO-PCL nanoparticle delivery seemed to enhance the therapeutic success even further, showing the promising potential for the clin. use of this therapeutic strategy to overcome MDR.
REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:1204388 CAPLUS
DOCUMENT NUMBER: 145:511655
TITLE: Nanoparticulate delivery systems comprising ceramide for treating multi-drug resistance
INVENTOR(S): Amiji, Mansoor M.; Shenoy, Dinesh B.; Vlerken, Lilian Van
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 11pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006257493	A1	20061116	US 2006-413067	20060427
PRIORITY APPLN. INFO.:			US 2005-675837P P	20050428

AB An encapsulated delivery system, and, in particular, a nanoparticulate delivery system representing a qual. different approach to overcoming multi-drug resistance while simultaneously administering the chosen drug treatment to a patient, e.g., in a site-specific manner, is disclosed. A composition according to the invention includes a therapeutically effective amount of one or more multi-drug resistance reversing agents selected from the group consisting of ceramide and ceramide modulators; and a therapeutically effective amount of a therapeutic agent, wherein the

therapeutic agent is different from the one or more multi-drug resistance reversing agents, and the one or more multi-drug resistance reversing agents and the therapeutic agent are encapsulated, preferably co-encapsulated, in a biocompatible, biodegradable delivery vehicle for delivery to a patient in need of treatment, for example, for specific localization at, or higher probability of delivery to, a treatment site in a patient administered the composition Preferably, the one or more multi-drug resistance reversing agents are ceramide, paclitaxel or tamoxifen. Thus, C6-ceramide (CER) and paclitaxel (PAX) were co-encapsulated in poly(ethylene oxide) (PEO)-modified poly(ε-caprolactone) (PCL) nanoparticles. Enhanced apoptotic activity and cell death were observed in vitro in the wildtype human ovarian cancer cell line SKOV3 due to an additive effect of individual PTX and CER cytotoxicities. However, in the multi-drug resistant (MDR) cells, there was significant enhancement of cell death when combining concns. of PTX and CER that individually did not result in significant cell killing.

L5 ANSWER 6 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:469652 CAPLUS
DOCUMENT NUMBER: 144:474951
TITLE: A composition comprising a stable lipid assembly for combination therapy of proliferative disorders
INVENTOR(S): Barenholz, Yechezkel; Khazanov, Elena
PATENT ASSIGNEE(S): University of Jerusalem Yissum Research Development Company of the Hebrew, Israel
SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006051549	A2	20060518	WO 2005-IL1200	20051115
WO 2006051549	A3	20060713		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2005303389	A1	20060518	AU 2005-303389	20051115
CA 2587470	A1	20060518	CA 2005-2587470	20051115
EP 1817004	A2	20070815	EP 2005-803747	20051115
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 101102752	A	20080109	CN 2005-80045520	20051115
IN 2007DN03574	A	20070831	IN 2007-DN3574	20070514
PRIORITY APPLN. INFO.:			US 2004-627281P P	20041115
			WO 2005-IL1200 W	20051115

OTHER SOURCE(S): MARPAT 144:474951
AB The present invention concerns a new medical treatment involving the combination of two active entities, as well as pharmaceutical compns. comprising the two active entities. Specifically, the invention provides a pharmaceutical composition comprising a stable lipid assembly

comprising as a first active entity an apoptosis-affecting lipid which does not self-aggregate in a polar environment to form liposomes and a lipopolymer. The pharmaceutical composition further comprises, as the second active entity, a cytotoxic amphipathic weak base drug carried by the lipid assembly or by a different liposome. According to one embodiment, the apoptosis-affecting lipid is a pro-apoptotic lipid. A preferred pro-apoptotic lipid is ceramide, preferably C6-ceramide. The cytotoxic amphipathic weak base drug is preferably doxorubicin or a biol. active, anthracycline-based doxorubicin analog thereof. Thus, doxorubicin was incorporated into sterically stabilized liposomes (SSL) composed of hydrogenated soybean phosphatidylcholine (HSPC) or DSPC liposome-forming lipid, stabilized by lipopolymer N-carbamyl-poly(ethylene glycol Me ether)-1,2-distearoyl-sn-glycero-3-phosphoethanolamine tri-Et ammonium salt (2kPEG-DSPE, 7.5 mol%), and having either 11.5 or 23 mol% of C6-Cer. The liposomes accumulated in tumor at much higher level than free doxorubicin, explaining superior therapeutic activity and reduced systemic and cardiac toxicity of doxorubicin delivered via SSL compared with free doxorubicin.

L5 ANSWER 7 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:456192 CAPLUS
DOCUMENT NUMBER: 145:327844
TITLE: Lactoferricin-induced apoptosis in estrogen-nonresponsive MDA-MB-435 breast cancer cells is enhanced by C6 ceramide or tamoxifen
AUTHOR(S): Furlong, Suzanne J.; Mader, Jamie S.; Hoskin, David W.
CORPORATE SOURCE: Department of Microbiology and Immunology, Faculty of Medicine, Dalhousie University, Halifax, NS, B3H 1X5, Can.
SOURCE: Oncology Reports (2006), 15(5), 1385-1390 CODEN: OCRPEW; ISSN: 1021-335X
PUBLISHER: Oncology Reports
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Bovine lactoferricin (LfcinB) is a cationic peptide that selectively induces caspase-dependent apoptosis in human leukemia and carcinoma cell lines. Ceramide is a second messenger in apoptosis signaling that has been shown to increase the cytotoxicity of various anti-cancer drugs. In this study, we determined whether manipulation of intracellular ceramide levels enhanced LfcinB-induced apoptosis of estrogen-nonresponsive MDA-MB-435 breast carcinoma cells. LfcinB caused DNA fragmentation and morphol. changes consistent with apoptosis in MDA-MB-435 breast cancer cell cultures, but did not affect the viability of untransformed mammary epithelial cells. MDA-MB-435 breast cancer cells also exhibited DNA fragmentation and morphol. changes consistent with apoptosis following exposure to the cell-permeable ceramide analog C6. An additive increase in DNA fragmentation was observed when both LfcinB and C6 ceramide were added to MDA-MB-435 breast cancer cell cultures. A greater than additive increase in DNA fragmentation was seen when LfcinB was used in combination with tamoxifen, which prevents the metabolism of endogenous ceramide to glucosylceramide by glucosylceramide synthase, as well as blocking estrogen receptor signaling. However, a selective inhibitor of glucosyl-ceramide synthase,1-phenyl-2-palmitoylamino-3-morpholino-1-propanol, failed to further increase DNA fragmentation by LfcinB, suggesting that tamoxifen enhanced LfcinB-induced apoptosis in breast cancer cells via a mechanism that did not involve glucosylceramide synthase inhibition. We conclude that combination therapy with LfcinB and tamoxifen warrants further investigation for possible use in the treatment of breast cancer.
REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 8 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:264352 CAPLUS
DOCUMENT NUMBER: 144:305123
TITLE: Combinations of ceramide and chemotherapeutic agents for inducing tumor cell death
INVENTOR(S): Wanebo, Harold J.; Mehta, Shashikant
PATENT ASSIGNEE(S): Roger Williams Hospital, USA
SOURCE: U.S., 43 pp., Cont.-in-part of U.S. Ser. No. 287,884, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 7015251	B1	20060321	US 2002-958453	20020424
WO 2000059517	A1	20001012	WO 2000-US9440	20000407

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-287884 B2 19990407
WO 2000-US9440 W 20000407

AB This invention provides a method for increasing apoptosis in tumor cells and a method of decreasing a size of a tumor, said methods comprising contacting the tumor cells with: a) an effective amount of at least one antitumor chemotherapeutic agent and b) an effective amount of a ceramide, sequentially or concomitantly, wherein the apoptosis induced by the combination of the antitumor chemotherapeutic agent and the ceramide is greater than the apoptosis induced by contact of the tumor cells with either the antitumor chemotherapeutic agent alone or the ceramide alone. This invention also provides a method of treating cancer in a subject which comprises a method according to either of the above-described methods. This invention provides a method for treating cancer in a subject comprising administering to the subject an effective amount of at least one antitumor chemotherapeutic agent and an effective amount of at least one ceramide, sequentially or concomitantly. This invention provides a pharmaceutical composition comprising at least one antitumor chemotherapeutic agent in an amount effective to induce apoptosis of tumor cells and at least one ceramide in an amount effective to induce apoptosis of tumor cells and a pharmaceutically acceptable carrier.
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 9 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:129173 CAPLUS
DOCUMENT NUMBER: 141:235794
TITLE: N-hexanoyl-sphingomyelin potentiates in vitro doxorubicin cytotoxicity by enhancing its cellular influx
AUTHOR(S): Veldman, R. J.; Zerp, S.; van Blitterswijk, W. J.;

Verheij, M.
CORPORATE SOURCE: The Netherlands Cancer Institute, Division of Cellular Biochemistry, Antoni van Leeuwenhoek Hospital, Amsterdam, NL-1066 CX, Neth.
SOURCE: British Journal of Cancer (2004), 90(4), 917-925
CODEN: BJCAAI; ISSN: 0007-0920
PUBLISHER: Nature Publishing Group
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Anticancer drugs generally have intracellular targets, implicating transport over the plasma membrane. For amphiphilic agents, such as the anthracycline doxorubicin, this occurs by passive diffusion. We investigated whether exogenous membrane-permeable lipid analogs improve this drug influx. Combinations of drugs and lipid analogs were coadministered to cultured endothelial cells and various tumor cell lines, and subsequent drug accumulation in cells was quantified. We identified N-hexanoyl-sphingomyelin (SM) as a potent enhancer of drug uptake. Low micromolar amts. of this short-chain sphingolipid, being not toxic itself, enhanced the uptake of doxorubicin up to 300% and decreased its EC50 toxicity values seven- to 14-fold. N-hexanoyl SM acts at the level of the plasma membrane, but was found not incorporated in (isolated) lipid rafts, and artificial disruption or elimination of raft constituents did not affect its drug uptake-enhancing effect. Further, any mechanistic role of the endocytic machinery, membrane leakage or ABC-transporter-mediated efflux could be excluded. Finally, a correlation was established between the degree of drug lipophilicity, as defined by partitioning in a two-phase octanol-water system, and the susceptibility of the drug towards the uptake-enhancing effect of the sphingolipid. A clear optimum was found for amphiphilic drugs, such as doxorubicin, epirubicin and topotecan, indicating that N-hexanoyl-SM might act by modulating the average degree of plasma membrane lipophilicity, in turn facilitating transbilayer drug diffusion. The concept of short-chain sphingolipids as amphiphilic drug potentiators provides novel opportunities for improving drug delivery technologies.

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 10 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:532671 CAPLUS
DOCUMENT NUMBER: 139:101145
TITLE: Preparation of thienopyrimidines as inhibitors of prolylpeptidase, inducers of apoptosis and cancer treatment agents
INVENTOR(S): Dumas, Jacques; Sibley, Robert; Wood, Jill
PATENT ASSIGNEE(S): Bayer Corporation, USA
SOURCE: PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

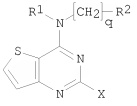
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003055890	A1	20030710	WO 2002-US41168	20021220

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,

KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002364211 A1 20030715 AU 2002-364211 20021220
PRIORITY APPLN. INFO.: US 2001-343048P P 20011221
WO 2002-US41168 W 20021220

OTHER SOURCE(S): MARPAT 139:101145
GI



AB The title compds. [I; X = OR3, NR3R4; R1 = H, alkyl; R2 = (un)substituted cycloalkyl, Ph, (un)saturated 4-8 membered heterocyclyl containing 1-3 heteroatoms selected from O and S; R3 = H, alkyl; R4 = (CH2)mA, (CH2)pOA; A = (un)substituted cycloalkyl, (un)saturated 4-8 membered heterocyclyl containing 1-4 heteroatoms selected from N, O and S, etc.; or NR3R4 = (un)saturated 4-8 membered heterocyclyl containing 0-4 heteroatoms selected from N, O and S; m, p = 0-5; q = 0-1; q + (m or p) = 1-6], useful for the inhibiting the prolylpeptidase, inducing apoptosis and treating cancer, were prepared E.g., a 3-step synthesis of I [X = (2-thienylmethyl)amino; R1 = H; R2 = 4-(MeO2C)C6H4; q = 1], starting with thieno[3,2-d]pyrimidine-2,4-diol, was given. All exemplified compds. I were found to inhibit prolylpeptidase at or below of 10 μM.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:532653 CAPLUS
DOCUMENT NUMBER: 139:101144
TITLE: Preparation of quinazolines and quinolines as inhibitors of prolylpeptidase, inducers of apoptosis and cancer treatment agents
INVENTOR(S): Dumas, Jacques; Sibley, Robert; Smith, Roger; Su, Ning; Chen, Yuanwei; Wood, Jill; Guernon, Leatte; Dixon, Julie; Brennan, Catherine; Boyer, Stephen
PATENT ASSIGNEE(S): Bayer Corporation, USA; et al.
SOURCE: PCT Int. Appl., 266 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

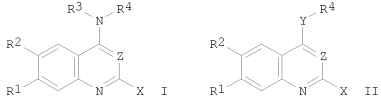
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003055866	A1	20030710	WO 2002-US41176	20021220

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,

UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002361846	A1	20030715	AU 2002-361846		20021220
PRIORITY APPLN. INFO.:			US 2001-343112P	P	20011221
			WO 2002-US41176	W	20021220

OTHER SOURCE(S): MARPAT 139:101144
GI



AB The title compds. [I or II; Z = CH, N; Y = O, S; X = OR5, NR5R6; R1, R2 = H, NH2, CN, halo, OH, NO2 (wherein R1 and R2 are both not H); R3 = H, alkyl; R4 = (CH2)yR41 (R41 = (un)substituted alkyl; y = 0-2)], useful for the inhibiting the prolyl peptidase, inducing apoptosis and treating cancer, were prepared Thus, reacting 2,4,6-trichloroquinazoline (preparation given) with Me 4-(aminomethyl)benzoate.HCl in the presence of AcONa in H2O followed by treating the resulting Me 4-{[(2,6-dichloro-4-quinazolinyl)amino]methyl}benzoate with piperidine afforded I [Z = N; X = piperidino; R1 = H; R2 = Cl; R3 = H; R4 = 4-(MeO2C)C6H4CH2]. Most of the exemplified compds. I and II were found to inhibit prolylpeptidase at or below of 10 μM.

REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 12 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN

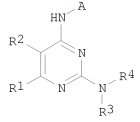
ACCESSION NUMBER:	2003:532524 CAPLUS
DOCUMENT NUMBER:	139:101141
TITLE:	Preparation of 2,4-diaminopyrimidines as inhibitors of prolylpeptidase, inducers of apoptosis and cancer treatment agents
INVENTOR(S):	Dumas, Jacques; Dixon, Julie; Sibley, Robert; Wood, Jill
PATENT ASSIGNEE(S):	Bayer Corporation, USA
SOURCE:	PCT Int. Appl., 47 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1
PATENT INFORMATION:	

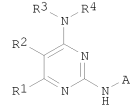
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003055489	A1	20030710	WO 2002-US41146	20021220
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,				

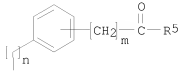
UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

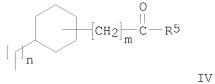
AU 2002367172	A1	20030715	AU 2002-367172		20021220
PRIORITY APPLN. INFO.:			US 2001-343047P	P	20011221
			WO 2002-US41146	W	20021220

OTHER SOURCE(S): MARPAT 139:101141
GI


I


II


III


IV

AB The title compds. [I or II; R1, R2 = H, halo, OH, etc.; R3 = H; R4 = (un)substituted alkyl, cycloalkyl, aryl, alkylaryl; or NR3R4 = (un)saturated 4-8 membered heterocyclyl which optionally contains 1-3 addnl. heteroatoms selected from N, O and S; A = III or IV; R5 = OH, OR6, NR8R9; R6 = alkyl, haloalkyl, aryl, haloaryl; R8, R9 = H, alkyl, aryl, etc.; n, m = 0-1], useful for the inhibiting prolylpeptidase, inducing apoptosis and treating cancer, were prepared E.g., a 3-step synthesis of I [A = 4-(HO2C)C6H4CH2; R1 = H; R2 = Me; R3 = H; R4 = 2-thienylmethyl], starting from Me 4-(aminomethyl)benzoate and 2,4-dichloro-5-methylpyrimidine, was given. All exemplified compds. I were found to inhibit prolylpeptidase at or below of 10 μM.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 13 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:	2002:963204 CAPLUS
DOCUMENT NUMBER:	138:362308
TITLE:	The role of MAPK pathways in the action of chemotherapeutic drugs
AUTHOR(S):	Boldt, Simone; Weidle, Ulrich H.; Kolch, Walter
CORPORATE SOURCE:	The Beatson Institute for Cancer Research, Cancer Research UK, Glasgow, G61 1BD, UK
SOURCE:	Carcinogenesis (2002), 23(11), 1831-1838 CODEN: CRNGDP; ISSN: 0143-3334
PUBLISHER:	Oxford University Press
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB In this study we have investigated the role of mitogen-induced and stress-activated MAP kinase pathways in the cellular response to taxol, etoposide and ceramide in three different human cancer cell lines: HeLa cervical carcinoma, MCF7 breast cancer and A431 squamous carcinoma cells. The mitogen-induced ERK MAPKs were linked to cell proliferation and survival, whereas the stress-activated MAPKs, p38 and JNK, were connected with apoptosis. Our results show that all drugs activated MAPKs, but that the extent and kinetics of activation were different. In order to assay the biol. consequences of drug-induced MAPK activation we employed selective MAPK inhibitors and measured both long-term clonogenic survival as well as short-term parameters including apoptosis, mitochondrial metabolic integrity and cell cycle progression. Our results show that drug induced toxicity is not correlated with any singular parameter, but rather a combination of effects on cell cycle and apoptosis. In certain constellations the modulation of MAPK pathways could enhance or decrease drug efficacies. These effects mainly pertained to the regulation of apoptosis and clonogenic survival, but they were highly dependent on the combination of drug and cell line without any clear patterns of correlations emerging. These results suggest that the modulation of MAPK pathways to enhance the efficacy of chemotherapeutic drugs is of limited value unless it is tailored to the specific combination of drug and cancer.
REFERENCE COUNT: 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 14 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:725478 CAPLUS
DOCUMENT NUMBER: 133:276331
TITLE: Ceramide and chemotherapeutic agents for inducing cell death in tumor cells
INVENTOR(S): Wanebo, Harold J.; Mehta, Shashikant
PATENT ASSIGNEE(S): Roger Williams Hospital, USA
SOURCE: PCT Int. Appl., 104 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000059517	A1	20001012	WO 2000-US9440	20000407
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1206270	A1	20020522	EP 2000-923188	20000407
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
US 7015251	B1	20060321	US 2002-958453	20020424
PRIORITY APPLN. INFO.:			US 1999-287884	A2 19990407
			WO 2000-US9440	W 20000407

AB This invention provides a method for increasing apoptosis in tumor cells and a method of decreasing a size of a tumor, said methods comprising contacting the tumor cells with: (a) an effective amount of at least one antitumor chemotherapeutic agent; and (b) an effective amount of a ceramide, sequentially or concomitantly, wherein the apoptosis induced by the combination of the

antitumor chemotherapeutic agent and the ceramide is greater than the apoptosis induced by contact of the tumor cells with either the antitumor chemotherapeutic agent alone or the ceramide alone. This invention also provides a method of treating cancer in a subject which comprises a method according to either of the above-described methods. This invention provides a method for treating cancer in a subject comprising administering to the subject an effective amount of at least one antitumor chemotherapeutic agent and an effective amount of at least one ceramide, sequentially or concomitantly. This invention provides a pharmaceutical composition comprising at least one antitumor chemotherapeutic agent in an amount effective to induce apoptosis of tumor cells and at least one ceramide in an amount effective to induce apoptosis of tumor cells and a pharmaceutically acceptable carrier. Paclitaxel-induced apoptosis in Jurkat cells was enhanced by C6-N-hexanoyl-D-sphingosine.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 15 OF 22 USPATFULL on STN

ACCESSION NUMBER: 2007:127957 USPATFULL

TITLE: SYSTEMS AND METHODS FOR SELECTION AND MAINTENANCE OF HOMOGENEOUS AND PLURIPOTENT HUMAN EMBRYONIC CELLS

INVENTOR(S): Salli, Ugar, Hummelstown, PA, UNITED STATES
Kester, Mark, Harrisburg, PA, UNITED STATES
Vrana, Kent E., Hummelstown, PA, UNITED STATES

PATENT ASSIGNEE(S): The Penn State Research Foundation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2007111306	A1	20070517
APPLICATION INFO.:	US 2006-557791	A1	20061108 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2005-734862P	20051109 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: GIFFORD, KRASS, SPRINKLE,ANDERSON & CITKOWSKI, P.C, PO BOX 7021, TROY, MI, 48007-7021, US
NUMBER OF CLAIMS: 30
EXEMPLARY CLAIM: 1
LINE COUNT: 2162

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A number of human disorders are characterized by degeneration or loss of specific cells, resulting in pathology associated with reduction or absence of cell function. Such diseases include neurodegenerative diseases and diabetes. Methods are described for obtaining a substantially homogeneous population of undifferentiated human embryonic stem cells including incubating a population of human embryonic stem cells with an amount of a selection agent. The selection agent is effective to reduce or eliminate differentiated embryonic stem cells from the population of cells such that a substantially homogeneous population of undifferentiated human embryonic stem cells is obtained. The substantially homogeneous population of undifferentiated embryonic stem cells may be produced without use of feeder cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 16 OF 22 USPATFULL on STN

ACCESSION NUMBER: 2007:95153 USPATFULL

TITLE: Pharmaceutical formulations employing short-chain sphingolipids and their use

INVENTOR(S): Veldman, Robert J., Huizen, NETHERLANDS
Van Blitterswijk, Wim J., Westzaan, NETHERLANDS
Verheij, Marcel, Lisse, NETHERLANDS
Koning, Gerben A., Houten, NETHERLANDS

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2007082855	A1	20070412	
APPLICATION INFO.:	US 2004-579230	A1	20041111	(10)
	WO 2004-IB3886		20041111	
			20060928	PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	GB 2003-26642	20031114
	GB 2003-26759	20031117

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: NIXON & VANDERHYE, PC, 901 NORTH GLEBE ROAD, 11TH FLOOR, ARLINGTON, VA, 22203, US
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Page(s)
LINE COUNT: 2321
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention pertains to pharmaceutical formulations which comprise (i) a drug (e.g., an amphiphilic drug) (e.g., an anthracycline) (e.g., doxorubicin) and (ii) a short-chain sphingolipid (e.g., a short-chain glycosphingolipid or a short-chain sphingomyelin) (e.g., N-octanoyl-glucosylceramide, referred to as C.sub.8-GlcCer) (e.g., N-hexanoyl-sphingomyelin, referred to herein as C.sub.6-SM), and which provide improved drug delivery and efficacy. The short-chain sphingolipidis selected from compounds of the following formula: ##STR1## wherein: R.sup.1 is independently: an O-linked saccharide group; or an O-linked polyhydric alcohol group; or: R.sup.1 is independently: an O-linked (optionally N-(C.sub.1-4alkyl)-substituted amino)-C.sub.1-6alkyl-phosphate group; or an O-linked (polyhydric alcohol-substituted)-C.sub.1-6alkyl-phosphate group; R.sup.2 is independently C.sub.3-9alkyl, and is independently unsubstituted or substituted; R.sup.3 is independently C.sub.7-19alkyl, and is independently unsubstituted or substituted; R.sup.4 is independently --H, --OH, or --O--C.sub.1-4alkyl; R.sup.N is independently --H or C.sub.1-4alkyl; the bond marked with an alpha (α) is independently a single bond or a double bond; if the bond marked with an alpha (α) is a double bond, then R.sup.5 is --H; if the bond marked with an alpha (α) is a single bond, then R.sup.5 is --H or --OH; the carbon atom marked (*) is independently in an R-configuration or an S-configuration; the carbon atom marked (**) is independently in an R-configuration or an S-configuration; and pharmaceutically acceptable salts, solvates, esters, ethers, chemically protected forms thereof. In one embodiment, the pharmaceutical formulation is a liposomal pharmaceutical formulation prepared using a mixture of lipids comprising, at least, vesicle-forming lipids (e.g., phospholipids) (e.g., phosphatidylcholines) (e.g., fully hydrogenated soy phosphatidylcholine (HSPC)) (e.g., dipalmitoyl-phosphatidylcholine (DPPC)) and said short-chain sphingolipid, and optionally cholesterol and optionally a vesicle-forming lipid which is derivatized with a polymer chain (e.g., a phosphatidylethanolamine (PE) which is derivatized with polyethyleneglycol (PEG)) (e.g., N-(carbonyl-methoxypolyethylene glycol 2000)-1,2-distearoyl-sn-glycero-3-phosphoethanolamine sodium salt (MPEG2000-DSPE). The present invention also pertains to methods for the preparation and use of such

formulations.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 17 OF 22 USPATFULL on STN
ACCESSION NUMBER: 2006:301138 USPATFULL
TITLE: Nanoparticulate delivery systems for treating multi-drug resistance
INVENTOR(S): Amiji, Mansoor M., Attleboro, MA, UNITED STATES
Shenoy, Dinesh B., Boston, MA, UNITED STATES
Vlerken, Lilian van, Brookline, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006257493	A1	20061116
APPLICATION INFO.:	US 2006-413067	A1	20060427 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2005-675837P	20050428 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: WEINGARTEN, SCHURGIN, GAGNEBIN & LEBOVICI LLP, TEN POST OFFICE SQUARE, BOSTON, MA, 02109, US
NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 741
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An encapsulated delivery system, and, in particular, a nanoparticulate delivery system representing a qualitatively different approach to overcoming multi-drug resistance while simultaneously administering the chosen drug treatment to a patient, e.g., in a site-specific manner, is disclosed. A composition according to the invention includes a therapeutically effective amount of one or more multi-drug resistance reversing agents selected from the group consisting of ceramide and ceramide modulators; and a therapeutically effective amount of a therapeutic agent, wherein the therapeutic agent is different from the one or more multi-drug resistance reversing agents, and the one or more multi-drug resistance reversing agents and the therapeutic agent are encapsulated, preferably co-encapsulated, in a biocompatible, biodegradable delivery vehicle for delivery to a patient in need of treatment, for example, for specific localization at, or higher probability of delivery to, a treatment site in a patient administered the composition. Preferably, the one or more multi-drug resistance reversing agents are ceramide, paclitaxel or tamoxifen.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 18 OF 22 USPATFULL on STN
ACCESSION NUMBER: 2006:70187 USPATFULL
TITLE: Combinations of ceramide and chemotherapeutic agents for inducing tumor cell death
INVENTOR(S): Wanebo, Harold J., East Greenwich, RI, UNITED STATES
Mehta, Shashikant, Warwick, RI, UNITED STATES
PATENT ASSIGNEE(S): Roger Williams Hospital, Providence, RI, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 7015251	B1	20060321
	WO 2000059517		20001012

APPLICATION INFO.: US 2000-958453 20000407 (9)
WO 2000-US9440 20000407
20020424 PCT 371 date
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1999-287884, filed on 7 Apr 1999, ABANDONED
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Cook, Rebecca
LEGAL REPRESENTATIVE: White, Esq., John P., Cooper & Dunham LLP
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 47 Drawing Figure(s); 24 Drawing Page(s)
LINE COUNT: 2051
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides a method for increasing apoptosis in tumor cells and a method of decreasing a size of a tumor , said methods comprising contacting the tumor cells with: a) an effective amount of at least one antitumor chemotherapeutic agent and b) an effective amount of a ceramide, sequentially or concomitantly, wherein the apoptosis induced by the combination of the antitumor chemotherapeutic agent and the ceramide is greater than the apoptosis induced by contact of the tumor cells with either the antitumor chemotherapeutic agent alone or the ceramide alone. This invention also provides a method of treating cancer in a subject which comprises a method according to either of the above-described methods. This invention provides a method for treating cancer in a subject comprising administering to the subject an effective amount of at least one antitumor chemotherapeutic agent and an effective amount of at least one ceramide, sequentially or concomitantly. This invention provides a pharmaceutical composition comprising at least one antitumor chemotherapeutic agent in an amount effective to induce apoptosis of tumor cells and at least one ceramide in an amount effective to induce apoptosis of tumor cells and a pharmaceutically acceptable carrier.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 19 OF 22 USPATFULL on STN
ACCESSION NUMBER: 2005:30390 USPATFULL
TITLE: Method and system for systemic delivery of growth arresting, lipid-derived bioactive compounds
INVENTOR(S): Kester, Mark, Harrisburg, PA, UNITED STATES
Stover, Thomas, Hershey, PA, UNITED STATES
Lowe, Tao, Hershey, PA, UNITED STATES
Adair, James, UNITED STATES
Kim, Young Shin, Hershey, PA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005025820	A1	20050203
APPLICATION INFO.:	US 2004-835520	A1	20040426 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-465938P	20030425 (60)
	US 2003-465937P	20030428 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Barbara E. Johnson, WEBB ZIESENHEIM LOGSDON ORKIN & HANSON, P.C., 700 Koppers Building, 436 Seventh Avenue, Pittsburgh, PA, 15219-1818

NUMBER OF CLAIMS: 77
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 20 Drawing Page(s)
LINE COUNT: 1954
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A system and method for optimizing the systemic delivery of growth-arresting lipid-derived bioactive drugs or gene therapy agents to an animal or human in need of such agents utilizing nanoscale assembly systems, such as liposomes, resorbable and non-aggregating nanoparticle dispersions, metal or semiconductor nanoparticles, or polymeric materials such as dendrimers or hydrogels, each of which exhibit improved lipid solubility, cell permeability, an increased circulation half life and pharmacokinetic profile with improved tumor or vascular targeting.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 20 OF 22 USPATFULL on STN
ACCESSION NUMBER: 2003:232006 USPATFULL
TITLE: Ceramide kinase and DNA encoding it
INVENTOR(S): Sugiura, Masako, Tokyo, JAPAN
Kono, Keita, Kawasaki-shi, JAPAN
Kohama, Takafumi, Tokyo, JAPAN
PATENT ASSIGNEE(S): SANKYO COMPANY, LIMITED, Tokyo, JAPAN (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003162206	A1	20030828
APPLICATION INFO.:	US 2002-315597	A1	20021210 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. WO 2001-JP4889, filed on 11 Jun 2001, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2000-178039	20000614

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FRISHAUF, HOLTZ, GOODMAN & CHICK, PC, 767 THIRD AVENUE, 25TH FLOOR, NEW YORK, NY, 10017-2023
NUMBER OF CLAIMS: 75
EXEMPLARY CLAIM: 1
LINE COUNT: 1913
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A protein having ceramide kinase activity which can be a target for a prophylactic or therapeutic medicament against neuronal disease, inflammation, HIV infection, type 2 diabetes mellitus, obesity, septicemia, arteriosclerosis and cancer. Specifically, a protein which comprises an amino acid sequence shown in the amino acid numbers 1-537 of SEQ ID Number 2 of the Sequence Listing, a DNA which encodes the protein, a recombinant vector comprising the DNA, a host cell transformed with the recombinant vector and a method for producing the protein. By using the method of the present invention, a compound is provided having a specifically activating or inhibiting activity to ceramide kinase and is useful as a medicament for treating a neuronal disorder, an anti-inflammatory medicament, a medicament for treating HIV infection, an anti-type 2 diabetes mellitus medicament, an anti-obesity medicament, an anti-septicemia medicament, an anti-arteriosclerosis medicament and an anticancer medicament.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 21 OF 22 USPATFULL on STN

ACCESSION NUMBER:	97:99045 USPATFULL
TITLE:	Liposomal ceramide-related liposomes and the therapeutic use thereof
INVENTOR(S):	Wei, Yong, Branchburg, NJ, United States Mayhew, Eric, Monmouth Junction, NJ, United States Ahmad, Imran, Plainsboro, NJ, United States Janoff, Andrew S., Yardley, PA, United States
PATENT ASSIGNEE(S):	The Lipsome Company, Inc., Princeton, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5681589		19971028
APPLICATION INFO.:	US 1995-545164		19951019 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1995-383291, filed on 2 Feb 1995 which is a continuation-in-part of Ser. No. US 1994-190295, filed on 2 Feb 1994, now abandoned		

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Kishore, Gollamudi S.
LEGAL REPRESENTATIVE:	Rubin, Kenneth B.
NUMBER OF CLAIMS:	15
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	21 Drawing Figure(s); 21 Drawing Page(s)
LINE COUNT:	1282

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides a compound having the formula R.sup.1 -Y.sup.1 --CHZ.sup.1 -CH(NY.sup.2 Y.sup.3)--CH.sub.2 -Z.sup.2, wherein: R.sup.1 is a straight-chained alkyl, alkenyl or alkynyl group having from 8 to 19 carbon atoms in the aliphatic chain; Y.sup.1 is --CH.dbd.CH--, --C.tbd.C-- or --CH(OH)CH(OH)--; Z.sup.1 is OH or a conversion-inhibiting group; Z.sup.2 is a conversion-inhibiting group; Y.sup.2 is H, a phenyl group, an alkyl-substituted phenyl group having from 1 to about 6 carbons in the alkyl chain, or an alkyl chain having from 1 to 6 carbons; Y.sup.3 is H or a group having the formula --C(O)R.sup.2 or --S(O).sub.2 R.sup.2 ; R.sup.2 is a straight-chained alkyl, alkenyl or alkynyl group having from 1 to 23 carbon atoms in the chain; and when Z.sup.2 is an amino, R.sup.2 is an aliphatic chain having from 1 to 9 or from 19 to 23 carbon atoms in the aliphatic chain.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 22 OF 22 USPATFULL on STN

ACCESSION NUMBER:	97:94269 USPATFULL
TITLE:	Methods of treatment using pharmaceutically active ceramide-related compositions
INVENTOR(S):	Wei, Yong, Branchburg, NJ, United States Mayhew, Eric, Monmouth Junction, NJ, United States Ahmad, Imran, Plainsboro, NJ, United States Janoff, Andrew S., Yardley, PA, United States
PATENT ASSIGNEE(S):	The Liposome Company, Inc., Princeton, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5677337		19971014
APPLICATION INFO.:	US 1995-547688		19951019 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1995-383291, filed on 2 Feb 1995, now patented, Pat. No. US 5631394 which is a continuation-in-part of Ser. No. US 1994-190295, filed on 2 Feb 1994, now abandoned		

```
DOCUMENT TYPE:          Utility
FILE SEGMENT:           Granted
PRIMARY EXAMINER:       Kishore, Gollamudi S.
LEGAL REPRESENTATIVE:   Rubin, Kenneth B.
NUMBER OF CLAIMS:       17
EXEMPLARY CLAIM:        1
NUMBER OF DRAWINGS:     21 Drawing Figure(s); 21 Drawing Page(s)
LINE COUNT:             1302
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB      This invention provides a compound having the formula R.sup.1 --Y.sup.1
        --CHZ.sup.1 --CH(NY.sup.2 Y.sup.3)--CH.sub.2 --Z.sup.2, wherein: R.sup.1
        is a straight-chained alkyl, alkenyl or alkynyl group having from 8 to
        19 carbon atoms in the aliphatic chain; Y.sup.1 is --CH.dbd.CH--,
        --C.tbd.C-- or --CH(OH)CH(OH)--; Z.sup.1 is OH or a conversion-
        inhibiting group; Z.sup.2 is a conversion-inhibiting group; Y.sup.2 is
        H, a phenyl group, an alkyl-substituted phenyl group having from 1 to
        about 6 carbons in the alkyl chain, or an alkyl chain having from 1 to 6
        carbons; Y.sup.3 is H or a group having the formula --C(O)R.sup.2 or
        --S(O).sub.2 R.sup.2 ; R.sup.2 is a straight-chained alkyl, alkenyl or
        alkynyl group having from 1 to 23 carbon atoms in the chain; and when
        Z.sup.2 is an amino, R.sup.2 is an aliphatic chain having from 1 to 9 or
        from 19 to 23 carbon atoms in the aliphatic chain.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.


=> d his

     (FILE 'HOME' ENTERED AT 10:16:05 ON 12 FEB 2008)

     FILE 'REGISTRY' ENTERED AT 10:16:44 ON 12 FEB 2008
                E "N-HEXANOYL-D-SPHINGOSINE"/CN 25
L1             1 S E1

     FILE 'MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 10:18:02 ON 12 FEB
     2008
L2           240 S L1
L3            15 S L2 AND (PACLITAXEL OR TAXOL)
L4            78 S L2 AND (?CANCER? OR ?TUMOR?)
L5            22 S L4 AND COMBINATION?

=>

---Logging off of STN---


=>
Executing the logoff script...


=> LOG Y

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                      ENTRY    SESSION
FULL ESTIMATED COST                                   130.28     138.56

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                      ENTRY    SESSION
CA SUBSCRIBER PRICE                                   -19.20     -19.20

STN INTERNATIONAL LOGOFF AT 10:24:56 ON 12 FEB 2008
```